

AMENDMENTS TO THE SPECIFICATION

Please replace paragraphs [0048] through [0052] as follows:

[0048] The following table is from Renkvist *et al.* (2001).

Table 1 Class I HLA-restricted cancer/testis antigens. All these antigens were found to be expressed by normal spermatocytes and/or spermatogonia of testis. Occasionally *MAGE-3*, *MAGE-4* and the *GAGE* genes were found to be expressed also in placenta (De Backer *et al.*, 1999; Cox *et al.*, 1994). The NY-ESO-1 antigen was found to be expressed in normal ovary cells (Chen *et al.*, 1997).

Gene	HLA allele	Peptide epitope	Authors	Tissue distribution among tumors ^a
<i>MAGE-A1</i>	A1	EADPTGH-SY	Traversari <i>et al.</i> 1992	Melanoma, breast carcinoma, SCLC (De Plaen <i>et al.</i> , 1999); De Smet <i>et al.</i> , 1994, van der Bruggen <i>et al.</i> , 1994a) – sarcoma, NSCLC (De Plaen <i>et al.</i> , 1999), De Smet <i>et al.</i> , 1994) – thyroid medullary carcinoma (van der Bruggen <i>et al.</i> , 1994a) – colon carcinoma (De Plaen <i>et al.</i> , 1999) – laryngeal tumors (De Smet <i>et al.</i> , 1994)
<i>MAGE-A1</i>	A3	SLFRAVI-TK	Chaux <i>et al.</i> 1999a	
<i>MAGE-A1</i>	A24	NYKHCFP-EI	Fujie <i>et al.</i> 1999	
<i>MAGE-A1</i>	A28	EVYDGR-EHSA (SEQ ID NO:15)	Chaux <i>et al.</i> 1999a	
<i>MAGE-A1</i> , -A2, -A3, -A6	B37	REPVTKA EML (SEQ ID NO:16)	Tanzarella <i>et al.</i> 1999	Melanoma, colon and breast carcinomas, SCLC (De Plaen <i>et al.</i> , 1999, De Smet <i>et al.</i> , 1994, van der Bruggen <i>et al.</i> , 1994a) – sarcoma, NSCLC (De Plaen <i>et al.</i> , 1999, De Smet <i>et al.</i> , 1994 – thyroid medullary carcinoma, H/N tumors, bronchial SCC (van der Bruggen <i>et al.</i> , 1994a) – laryngeal tumors (De Smet <i>et al.</i> , 1994) – leukemias (De Plaen <i>et al.</i> , 1994)
<i>MAGE-A1</i>	B53	DPARYEF-LW	Chaux <i>et al.</i> 1999a	Melanoma, breast carcinoma, SCLC (De Plaen <i>et al.</i> , 1999, De Smet <i>et al.</i> , 1994, Van den Eynde <i>et al.</i> , 1999) – sarcoma, colon carcinoma, NSCLC (De Plaen <i>et al.</i> , 1999, De Smet <i>et al.</i> , 1994) – thyroid medullary carcinoma (van
<i>MAGE-A1</i>	Cw2	SAFPTTIN-F	Chaux <i>et al.</i> 1999a	
<i>MAGE-A1</i>	Cw3	SAYGEPR-KL	Chaux <i>et al.</i> 1999a	
<i>MAGE-A1</i>	Cw16	SAYGEPR-KL	van der Bruggen <i>et al.</i>	

			1994b	der Bruggen <i>et al.</i> , 1994a)
<i>MAGE-A2</i>	A2	KMVELV_ HFL	Visseren <i>et al.</i> 1997	Melanoma, colon and breast carcinomas, SCLC (De Plaen <i>et al.</i> , 1999, De Smet <i>et al.</i> , 1994, van der Bruggen <i>et al.</i> , 1994a) – sarcoma, NSCLC (De Plaen <i>et al.</i> , 1999, De Smet <i>et al.</i> , 1994) – thyroid medullary carcinoma (van der Bruggen <i>et al.</i> , 1994a)– laryngeal tumors (Lurquin <i>et al.</i> , 1997) – leukemias (De Plaen <i>et al.</i> , 1999)
<i>MAGE-A2</i>	A2	YLQVFGI_ EV	Visseren <i>et al.</i> 1997	
<i>MAGE-A2</i>	A24	EYLQLVF_ GI	Tahara <i>et al.</i> 1999	
<i>MAGE-A3</i>	A1	EADIPIGH LY(<u>SEQ ID NO:17</u>)	Gaugler <i>et al.</i> 1994	Melanoma, colon and breast carcinomas (De Plaen <i>et al.</i> , 1999, van der Bruggen <i>et al.</i> , 1994a) – H/N tumors (Chen <i>et al.</i> , 1997) – bronchial SCC, thyroid medullary and bladder carcinoma, sarcomas, SCLC, NSCLC, (van der Bruggen <i>et al.</i> , 1994a) – leukemias (De Smet <i>et al.</i> , 1994)
<i>MAGE-A3</i>	A2	FLWGPR_ ALV	van der Bruggen <i>et al.</i> 1994a	
<i>MAGE-A3</i>	A24	TFPDLES_ EF	Oiso <i>et al.</i> 1999 [
<i>MAGE-A3</i>	A24	IMPKAGL_ LI	Tanaka <i>et al.</i> 1997	
<i>MAGE-A3</i>	B44	MEVDPIG_ HLY (<u>SEQ ID NO:18</u>)	Hermann <i>et al.</i> 1996 Fleischhauer <i>et al.</i> 1996	
<i>MAGE-A3</i>	B52	WQYFFP VIF	Russo <i>et al.</i> 2000	
<i>MAGE-A4</i>	A2	GVYDGR EHTV (<u>SEQ ID NO:19</u>)	Duffour <i>et al.</i> 1999	Melanoma, NSCLC, sarcomas, esophageal, colon and breast carcinomas (De Plaen <i>et al.</i> , 1999)
<i>MAGE-A6</i>	A34	MVKISGG PR	Zorn and Hercent, 1999b	Melanoma, NSCLC, colon carcinoma, leukemias (De Plaen <i>et al.</i> , 1999)
<i>MAGE-A10</i>	A2	GLYDGM EHL	Huang <i>et al.</i> 1999	Not defined
<i>MAGE-A12</i>	Cw7	VRIGHLY IL	Panelli <i>et al.</i> 2000 Heidecker <i>et al.</i> 2000	Melanoma, myeloma, brain tumors, sarcoma, leukemias, SCLC, NSCLC, H/N tumors, bladder, lung, esophageal, breast, prostate and colorectal carcinoma (De Plaen <i>et al.</i> , 1994)
<i>BAGE</i>	Cw16	AARAVFL AL	Boer <i>et al.</i> 1995	Melanoma, bladder and mammary carcinomas, H/N SCC, NSCLC,

<i>DAM-6</i> , - <i>10</i>	A2	FLWGPR AYA	Fleischhauer <i>et al</i> 1998	sarcoma Melanoma, skin tumors, mammary and ovarian carcinomas (Lurquin <i>et al.</i> , 1997) – lung carcinoma (Dabovic <i>et al.</i> , 1995; Lurquin <i>et al.</i> , 1997) – seminomas (Dabovic <i>et al.</i> , 1995)
<i>GAGE-1</i> , - <i>2</i> , - <i>8</i>	Cw6	YRPRPRR Y	Van den Eynde <i>et al.</i> 1995 De Backer <i>et al.</i> 1999	Melanoma, sarcoma, NSCLC, SCLC, mesothelioma, sarcoma, seminoma, leukemias, lymphomas, H/N tumors, bladder, esophageal, mammary, colon, prostate carcinomas
<i>GAGE-1</i> , - <i>4</i> , - <i>5</i> , - <i>6</i> , - <i>7B</i>	A29	YYWPRP RRY	De Backer <i>et al</i> 1999	Melanomas, H/N tumors, leukemias, esophageal, lung and bladder carcinomas
<i>NA88-A</i>	B13	MTQGQH FLQKV (SEQ ID NO:20)	Moreau-Aubrey, <i>et al.</i> 2000	Melanoma
<i>NY-ESO-1</i>	A2	SLLMWIT- QCFL (SEQ ID NO:21)	Jäger <i>et al.</i> 1998	Melanoma, sarcoma, B- lymphomas, hepatoma, H/N tumors, bladder, lung, prostate, ovarian, thyroid and breast carcinoma (Chen <i>et al.</i> , 1997)
<i>NY-ESO-1a</i>	A2	SLLMWIT- QC	Jäger <i>et al.</i> 1998	
(CAG-3)	A2	QLSLLM- WIT	Jäger <i>et al.</i> 1998	
	A31	ASGPGGG- APR (SEQ ID NO:22)	Wang <i>et al.</i> 1998b	

^aTissue distribution among tumors as described in the given references when different from the paper first reporting the sequence of the epitope.

[0049] The following table is from Renkvist *et al.* (2001).

Table 2 Class I HLA-restricted melanocyte differentiation antigens. These antigens can only be expressed in normal and neoplastic cells of the same lineage (namely melanocytes, skin, retina, peripheral ganglia) or in normal cells of the prostate gland.

Gene	HLA allele	Peptide epitope	Authors
<i>MART-1</i> / <i>Melan-A</i> ^a	A2	AAGIGILTV	Coulie <i>et al.</i> 1994
			Kawakami <i>et al.</i> 1994a
	A2	EAAGIGILTV (SEQ ID NO:23)	Schneider <i>et al.</i> 1998
	A2	ILTVILGVL	Castelli <i>et al.</i> 1995

MCIR	B45	AEEAAGIGIL (<u>SEQ ID NO:24</u>)	Schneider <i>et al.</i> 1998
	B45	AEEAAGIGILT (<u>SEQ ID NO:25</u>)	Schneider <i>et al.</i> 1998
	A2	TILLGIFFL	Salazar-Onfray <i>et al.</i> 1997
	A2	FLALIICNA	Salazar-Onfray <i>et al.</i> 1997
Gp100	A2	KTWGQYWQV	Bakker <i>et al.</i> 1995
	A2	AMLGHTTMEV (<u>SEQ ID NO:26</u>)	Tsai <i>et al.</i> 1997
	A2	MLGHTTMEV	Tsai <i>et al.</i> 1997
	A2	SLADTNSLAV (<u>SEQ ID NO:27</u>)	Tsai <i>et al.</i> 1997
	A2	ITDQVPFSV	Kawakami <i>et al.</i> 1995
	A2	LLDGTATLRL (<u>SEQ ID NO:28</u>)	Kawakami <i>et al.</i> 1994b
	A2	YLEPGPVTA	Cox <i>et al.</i> 1994
	A2	VLYRYGSFSV (<u>SEQ ID NO:29</u>)	Kawakami <i>et al.</i> 1995
	A2	RLMKQDFS	Kawakami <i>et al.</i> 1998
	A2	FLPRIFCSC	Kawakami <i>et al.</i> 1998
	A3	LIYRRRLMK	Kawakami <i>et al.</i> 1998
	A3	ALNFPQSQK	Kawashima <i>et al.</i> 1998
	A3	SLIYRRRLMK (<u>SEQ ID NO:30</u>)	Kawashima <i>et al.</i> 1998
	A3	ALLAVGATK	Skipper <i>et al.</i> 1996
	A24	VYFFLPDHL	Robbins <i>et al.</i> 1997
	Cw8	SNDGPTLI	Castelli <i>et al.</i> 1999
PSA	A1	VSHSFPHPY (<u>SEQ ID NO:31</u>)	Corman <i>et al.</i> 1998
	A2	FLTPKKLQCV (<u>SEQ ID NO:32</u>)	Correale <i>et al.</i> 1997
	A2	VISNDVCAQV (<u>SEQ ID NO:33</u>)	Correale <i>et al.</i> 1997
PSM Tyrosinase	A1	HSTNGVTRIY (<u>SEQ ID NO:34</u>)	Corman <i>et al.</i> 1998
	A1	KCDICTDEY	Kittlesen <i>et al.</i> 1998
	A1	SSDYVIPIGTY (<u>SEQ ID NO:35</u>)	Kawakami <i>et al.</i> 1998
	A2	YMDGTMSQV	Wölfel <i>et al.</i> 1994
	A2	MLLAVLYCL	Wölfel <i>et al.</i> 1994
	A24	AFLPWHLF	Kang <i>et al.</i> 1995
	B44	SETWRDIDF	Brichard <i>et al.</i> 1996
TRP-1 (or gp75) TRP-2	A31	MSLQRQFLR	Wang <i>et al.</i> 1996b
	A2	SVYDFVWL	Parkhurst <i>et al.</i> 1998
	A2	TLDSQVMSL	Noppen <i>et al.</i> 2000
	A31	LLGPGRPYR	Wang <i>et al.</i> 1996a
	A33	LLGPGRPYR	Wang <i>et al.</i> 1998a
	Cw8	ANDPIFVVL	Castelli <i>et al.</i> 1999

^aTwo different groups simultaneously discovered this gene and gave it two different names, MART-1 and Melan-A respectively

[0050] The following table is from Renkvist *et al.* (2001).

Table 3 Class I HLA-restricted widely expressed antigens

Gene	HLA	Peptide epitope	Tissue distribution		Reference
			Tumors	Normal tissues	
<i>ART-4</i>	A24	AFLRHAAL DYPSLSATDI (SEQ ID NO:36)	SCC, SCLC, H/N tumors, leukemia, lung, esophageal, gastric, cervical, endometrial, ovarian and breast carcinomas	Testis, placenta, fetal liver	Kawano <i>et al.</i> 2000
<i>CAMEL</i>	A2	MLMAQEALAF L (SEQ ID NO:37)	Melanoma	Testis, placenta, heart, skeletal muscle, pancreas	Aarnoudse <i>et al.</i> 1999
<i>CEA</i>	A2	YLSGANLNL (CAP-1) ^a	Melanoma	Testis, placenta, heart, skeletal muscle, pancreas	Tsang <i>et al.</i> 1995
<i>CEA</i>	A3	HLFGYSWYK	Colon, rectum, pancreas, gastric, breast and lung carcinomas	Gastrointestinal embryonic tissue	Kawashima <i>et al.</i> 1999
<i>Cyp-B</i>	A24	KFHRVIKDF DFMIQGGDF	Lung adenocarcinoma, T cell leukemia, lymphosarcoma – bladder, ovarian, uterine and esophagela SCC,	Ubiquitously expressed in normal tissues	Gomi <i>et al.</i> 1999
<i>HER2/neu</i>	A2	KIFGSLAFL	Melanoma – ovarian and breast carcinomas	Epithelial cells	Risk <i>et al.</i> 1995
<i>HER2/neu</i>	A2	IISAVVGIL	Melanoma, ovarian, pancreatic (Pieper <i>et al.</i> , 1999) ^b and breast carcinomas	Epithelial cells	Peoples <i>et al.</i> 1995
<i>HER2/neu</i>	A2	RLLQETELV	Melanoma, ovarian, gastric, pancreatic (Pieper	Epithelial cells	Kono <i>et al.</i> 1998

			<i>et al.</i> , 1999) and breast carcinomas		
<i>HER2/neu</i>	A2	VVLGVVFGI ILHNGAYSL YMIMVKCWMI (SEQ ID NO:38)	Melanoma, ovarian, gastric, pancreatic (Pieper <i>et al.</i> , 1999) and breast carcinomas	Epithelial cells	Rongcun <i>et al.</i> 1999
<i>HER2/neu</i>	A3	VLRENTSPK	Melanoma, ovarian, gastric, pancreatic (Pieper <i>et al.</i> , 1999) and breast carcinomas	Epithelial cells	Kawashima <i>et al.</i> 1999
<i>HTERT^c</i>	A2	ILAKFLHWL	Lung, and ovarian carcinomas – multiple myeloma, melanoma, sarcoma, acute leukemias, non-Hodgkin's lymphomas	Hematopoietic stem cells and progenitors; germinal center cells; basal keratinocytes; gonadal cells; certain proliferating epithelial cells	Vonderheide <i>et al.</i> 1999
<i>HTRT^c</i>	A2	ILAKFLHWL RLVDDFLV	Lung, prostate and ovarian carcinomas, multiple myeloma, melanoma, sarcoma, acute leukemias, non-Hodgkin's lymphomas	Circulating B cells; germinal center B cells; thymocytes; CD34+ progenitor hemopoietic cells	Minev <i>et al.</i> 2000
<i>iCE</i>	B7	SPRWWPTCL	RCC	Kidney, colon, small intestine, liver, heart, pituitary gland, adrenal gland, prostate, stomach	Ronsin <i>et al.</i> 1999
<i>MUCI</i>	A11	STAPPAHGV	Breast and ovarian carcinomas, multiple myeloma, B-cell carcinoma, multiple myeloma	None ^d	Domenech <i>et al.</i> 1995
<i>MUCI</i>	A2	STAPPVHNV	Breast and ovarian carcinoma, multiple myeloma, B-cell lymphoma	None ^d	Brossart <i>et al.</i> 1999
<i>MUC2</i>	A2	LLNQLQVNL MLGWREHV	Ovary, pancreas and breast	Colon, small intestine,	Böhm <i>et al.</i> 1998

			mucinous tumors, colon carcinoma of non-mucinous type	bronchus, cervix and gall bladder	
<i>PRAME</i>	A24	LYVDSLFFL	Melanoma, H/N and lung SCC, NSCLC (van Baren <i>et al.</i> , 1998), RCC, adenocarcinoma, sarcoma, leukemias	Testis, endometrium, ovary, adrenals, kidney, brain, skin	Ikeda <i>et al.</i> 1997
<i>P15</i>	A24	AYGLDFYIL	Melanoma	Testis, spleen, thymus, liver, kidney, adrenal tissue, lung tissue, retinal tissue	Robbins <i>et al</i> 1995
<i>RU1</i>	B51	VPYGSFKHV	Melanoma, renal and bladder carcinomas	Testis, kidney, heart, skin, brain, ovary, liver, lung, lymphocytes, thymus, fibroblasts	Morel <i>et al.</i> 2000
<i>RU2</i>	B7	LPRWPPPQL	Melanoma, sarcomas leukemia – brain, esophageal and H/N tumors – renal, colon, thyroid, mammary, bladder, prostatic and lung carcinomas	Testis, kidney, liver, urinary bladder	Van den Eynde <i>et al.</i> 1999
<i>SART-1</i>	A24	EYRGFTQDF	Esophageal, H/N and lung SCC – adenocarcinoma, uterine cancer	Testis, fetal liver	Kikuchi <i>et al.</i> 1999
<i>SART-1</i>	A*26 01	KGSGKMKTE	Esophageal, H/N and lung SCC, adenocarcinoma, uterine cancer	Testis, fetal liver	Shichijo <i>et al.</i> 1998
<i>SART-3</i>	A24	VYDYNCHVDL (SEQ ID NO:39) AYIDFEMKI	H/N, esophageal and lung SCC, adenocarcinoma,	Lymphoid cells, fibroblasts, testis, fetal liver	Yang <i>et al</i> 1999

			leukemia, melanoma		
<i>WT1</i>	A2	RMFPNAPYL	Gastric, colon, lung, breast, ovary, uterine, thyroid and hepatocellular carcinomas – leukemia (including AML, ALL and CML)	Kidney, ovary, testis, spleen	Oka <i>et al.</i> 2000

^aCAP-1 is an alternative name of this peptide

^bTissue distribution among tumors as described in the given references when different from the paper first reporting the sequence of the epitope

^cTelomerase is expressed in most human tumors: those listed were shown to be susceptible to lysis by cytotoxic T lymphocytes

^dAll epithelial tissues express mucin-like hyperglycosylated molecules

[0051] The following table is from Renkvist *et al.* (2001).

TABLE 4. CLASS I HLA-RESTRUCTURED TUMOR-SPECIFIC ANTIGENS, INCLUDING BOTH UNIQUE (CDK-4, MUM-2, β -CATENIN, HLA-A2-R170I, ELF2 M, MYOSIN-M, CASPASE-8, KIAA0205, HSP70-2M) AND SHARED (CAMEL, TRP-2/INT2, GNT-V 250, ANTIGENS

Gene	HLA allele	Peptide epitope	<u>Tissue distribution</u>		Reference
			Tumors	Normal tissues	
<i>AFP</i>	A2	GVALQTMKQ	Hepatocellular carcinoma	Fetal liver	Butterfield <i>et al.</i> 1999
β -Catenin/m	A24	SYLDSGIHF	Melanoma	None	Robbins <i>et al.</i> 1996
<i>Caspase-8/m</i>	A2	FPSDSWCYF	H/N tumors	None	Mandruzzato <i>et al.</i> 1997
<i>CDK-4/m</i>	A2	ACDPHSGHFV (SEQ ID NO:40)	Melanoma	None	Wöfel <i>et al.</i> 1995
<i>ELF2 M</i>	A68	ETVSEQSNV	Lung SCC	None	Hogan <i>et al.</i> 1998
<i>GnT-V</i>	A2	VLPDVFIRC(V) ^a (SEQ ID NO:41)	Melanoma, brain tumors, sarcoma	Breast and brain (low expression)	Guilloux <i>et al.</i> 1996
<i>G250</i>	A2	HLSTAFARV	RCC, colon, ovarian and cervical carcinomas	None	Vissers <i>et al.</i> 1991
<i>HSP70-2M</i>	A2	SLFEGIDIY	RCC, melanoma, neuroblastoma	None	Gaudin <i>et al.</i> 1999
<i>HA-A*0201-R170I</i>	A2	CVEWLRIYLE- NGK (SEQ ID NO:42)	RCC	None	Brändle <i>et al.</i> 1996
<i>HST-2</i>	A31	YSWMDISCWI	Gastric signet cell	None	Suzuki <i>et al.</i> 1999

		(SEQ ID NO:43)	carcinoma		
KIAA0205	B44*03	AEPINIQTV	Bladder cancer	None	Gueguen <i>et al.</i> 1998
MUM-1	B44	EEKLIVVLF	Melanoma	None	Coulie <i>et al.</i> 1995
MUM-2	B44	SELFRLGLDY	Melanoma	None	Coulie <i>et al.</i> 1995
		(SEQ ID NO:44)			
MUM-2	Cw6	FRSGLDSYV	Melanoma	None	Chiari <i>et al.</i> 1999
MUM-3	A28	EAFIQPITR	Melanoma	None	Baurain <i>et al.</i> 2000
Myasin/m	A3	KINKNPKYK	Melanoma	None	Zorn and Hercend, 1999a
RAGE	B7	SPSSNRIRNT	Melanoma, sarcomas, mesotheliomas, H/N tumors, bladder, renal, colon and mammary carcinomas	Retina only	Gaugler <i>et al.</i> 1996
		(SEQ ID NO:45)			
SART-2	A24	DYSARWNEI	H/N and lung SCC, lung adenocarcinoma, RCC, melanoma, brain tumors, esophageal and uterine cancers	None	Nakao <i>et al.</i> 2000
TRP-2/INT2	A68	AYDFLYNYL SYTRLFLIL EVISCKLIKR	Melanoma	None	Lupetti <i>et al.</i> 1998
		(SEQ ID NO:46)			
707-AP	A2	RVAALARDA	Melanoma	None ^b	Morioka <i>et al.</i> 1995

^a VLPDVFIRC(V) = nonamer and decamer peptides are both recognized by CTLs

^b This antigen is not expressed in normal cells but, as the tissue of the testis was not tested, it will not become clear to which category the antigen may belong until more information is available

[0052] The following table is from Renkvist *et al.* (2001).

TABLE 5. CLASS II HLA-RESTRICTED ANTIGENS

Gene	HLA allele	Peptide epitope	Tissue distribution		Reference
			Tumors	Normal tissues	
Epitopes from normal protein antigens					
<i>Amexin II</i>	DRB*0401	DVPKWISIM-TERSVPH (SEQ ID NO:47)	Melanoma	Not done	Li <i>et al.</i> 1998
<i>Gp100</i>	DRB1*0401	WNRQLYPE-WTEAQRLD (SEQ ID NO:48)	Melanoma	Melanocytes	Li <i>et al.</i> 1998
<i>MAGE-1, -2, -3, -6</i>	DRB*1301 DRB*1302	LLKYRARIP-VTKAE (SEQ ID NO:49)	Melanoma, lung and breast carcinomas, H/N SCC	Testis, placenta	Chaux <i>et al.</i> 1999a
<i>MAGE-3</i>	DR*11-1	TSYVKVLHHM-VKISG	Melanoma, lung and	Testis,	Manici <i>et</i>

		(SEQ ID NO:50)	breast carcinomas, H/N SCC	placenta	<i>al.</i> 1999
<i>MAGE-3</i>	DRB*1301 DRB*1302	AELVHFLLLK- YRAR (SEQ ID NO:51)	Melanoma, lung and breast carcinomas, H/N SCC	Testis, placenta	Chaux <i>et al.</i> 1999b
<i>MART-1</i> <i>/Melan-A</i>	DRB1*0401	RNGYRALMDKS- LHVGTTQCALTRR (SEQ ID NO:52)	Melanoma	Melanocytes	Zarour <i>et al.</i> 2000
<i>MUCI</i>	DR3	PGSTAPPAHGVT (SEQ ID NO:53)	Breast and ovarian cancers; multiple myeloma, B-cell lymphoma	None ^a	Hitbold <i>et al.</i> 1998
<i>NY-ESO-1</i>	DRB4*0101	VLLKEFTVSG (SEQ ID NO:54)	Melanoma, B- lymphoma, hepatoma (Chen et al., 1997) ^b , sarcoma, H/N tumors, - bladder, lung, prostate, ovarian, thyroid and breast carcinomas	Testis	Zeng <i>et al.</i> 2000
<i>NY-ESO-1</i>	DRB4*0101 -0103	PLPVPGVLLK- EFTVSNGI (SEQ ID NO:55) VLLKEFTVSG- NILTIRLT (SEQ ID NO:56) AADHRQLQL- SISSCLQQL (SEQ ID NO:57)	B-Lymphoma, melanoma, sarcoma, H/N tumors, hepatoma (Chen et al., 1997) - bladder, lung, prostate, ovarian, thyroid and breast carcinomas	Testis	Jäger <i>et al.</i> 2000
<i>PSA</i>	DR4	ILLGRMSLFM- PEDTG (SEQ ID NO:58) SLFHPEDTGQVFQ (SEQ ID NO:59) QVFQVSHSFPHPLYD (SEQ ID NO:60) NDLMLRLSEPAELT (SEQ ID NO:61) KKLQCVQLHVISM (SEQ ID NO:62) GVLQGITSMSGSEPCA (SEQ ID NO:63)	Melanoma	Melanocytes	Corman <i>et al.</i> 1998
<i>Tyrosinase</i>	DRB1*0401	QNILLSNAPLGPFQ (SEQ ID NO:64) DYSYLQSDPD- SFQD (SEQ ID NO:65) SYLQSDPDPSFQD (SEQ ID NO:66)	Melanoma	Melanocytes	Topalian <i>et al.</i> 1994 Topalian <i>et al.</i> 1996
<i>Tyrosinase</i>	DRB1*1501	RHRPLQEVYP- EANAPIGHNRE (SEQ ID NO:67)	Melanoma	Melanocytes	Kobayashi <i>et al.</i> 1998a
<i>Tyrosinase</i>	DRB1*0405	EIWRDIDFAHE (SEQ ID NO:68)	Melanoma	Melanocytes	Kobayashi <i>et al.</i> 1998b

Epitopes from mutated protein antigens

HPV-E7	DR*0401	LFMDTLSFVCPLC (SEQ ID NO:69)	Cervical carcinomas	None	Höhn <i>et al.</i> 1999
	DR*0407	LFMDSLNFVCPWC (SEQ ID NO:70)			
CDC27/m	DRB1*0401	FSWAMDLDPKGA (SEQ ID NO:71)	Melanoma	None	Wang <i>et al.</i> 1999a
TPI/m	DRB1*0101	GELIGILNAAKVPAD (SEQ ID NO:72)	Melanoma	None	Pieper <i>et al.</i> 1999

^a All epithelial tissues express highly glycosylated mucins whereas tumor cells often show hypoglycosylated mucins with a normal protein sequence.

^b Tissue distribution among tumors as described in the given references when different from the paper first reporting the sequence of the epitope.